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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/522,117 03/09/00 CALDWELL

W 627-311CT

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EXAMINER

BALASUBRAMANIAN, V

ART UNIT

PAPER NUMBER

1624

DATE MAILED:

08/02/00

**BEST AVAILABLE COPY**

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/522,117

Applicant(s)

Caldwell et al.

Examiner  
Venkataraman Balasubramanian

Group Art Unit  
1624



☒ Responsive to communication(s) filed on Jun 23, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 12-20 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 12-20 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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### DETAILED ACTION

Applicants' response to restriction requirement filed on 6/23/2000 is made of record. Cancellation of claims 1-11 and addition of new claims 12-20 is acknowledged. Applicant's election without traverse of Group II in Paper No. 4 is also acknowledged. The restriction is therefore made **FINAL**.

Claims 12-20 are now pending.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Following reasons apply. Any claim not specifically rejected is rejected as being dependent on a rejected claim.

1. In claim 12, recitation of X as carbon bonded to substituent species is indefinite as it is not clear what these substituents are. As recited, the valence requirement of the group of substituents recited therein have not be met with and hence it is not clear what is the structural make-up of these groups.
2. Same reason also applies to the definition of A, A' and A'' where again the substituents valence requirement of the intended substituents are not met with properly.

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3. Claim 13 is indefinite as it recites "the method of claim 12" whereas claim 12 is a compound claim not a method claim. Appropriate correction is needed.
4. The species claim 20 recites a species bearing pyrimidinyl group which outside the scope of claim 12. See second species. Note pyrimidinyl group belongs to non-elected Group I. Its deletion is suggested.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 1-11 are rejected under 35 U.S.C. 102(a) as being anticipated by Caldwell et al. WO 97 40011 or US 5,861,423 (102(e) date).

Caldwell et al. teaches several pyridinyl substituted olefinic amines claimed herein for the treatment of central nervous disorders. See formula shown on page 9 and note the definition of A, A', A'', X, X', E', E'', Z', Z'' groups and value of m, n, p shown on page . Note with the above defined groups, reference compounds includes compounds claimed herein. See page 14-15 for specific species which includes some of the species recited in claim 9. Note some species are shown

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as cis and trans forms (ie present as Z and E forms). See page 28-35 for preparation of these compounds.

Claims 12-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dull et al. US 5,616,716.

Dull et al. teaches several pyridinyl substituted olefinic amines claimed herein for the treatment of central nervous disorders. See formula shown on col. 5 and note the definition of A, A', A'', X, X', E', E'', Z', Z'' groups and value of m, n, p shown on col. 5-6. Note with the above defined groups, reference compounds includes compounds claimed herein. See col.8 for specific species which includes some of the species recited in claim 9. Note some species are shown as cis and trans forms (ie present as Z and E forms). See col. 14-18 for process of making these compounds.

Claims 12-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Bencherif et al. US 5,811,442.

Bencherif et al. teaches several (5-substituted)pyridinyl- olefinic amines claimed herein for the treatment of central nervous disorders. See Formula I shown on col. 3 and note the definition of A, A', A'', X, X', E', E'', Z', Z'' groups and value of m, n, p shown on col. 3-6. Particularly note n can be 1-8, preferably 1, 2 or 3 and most preferably 2 or 3. Note with the above defined groups, reference compounds includes compounds claimed herein. See col.6-7 for process of making these compounds and for specific species which includes some of the species recited in claim 9. Note some species shown are cis and trans (ie present as Z and E forms). See col. 12-18 for examples of making these compounds.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell et al.

WO 97 40011.

Teachings of Caldwell et al. as discussed in the above 102 rejection is incorporated herein. Instant claims differ from the reference in requiring, in addition to substituents in the olefinic side chain, substituents in the pyridine ring. Caldwell et al. teaches in the examples of compounds, unsubstituted pyridine ring. However, Caldwell et al. teaches the equivalency of the exemplified pyridine ring with variously substituted pyridine rings in the definition of A, A' and A". Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in pyridine ring and as well as the side chain as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dull et al. US 5,616,716.

Teachings of Dull et al. as discussed in the above 102 rejection is incorporated herein.

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Claims 1-20 differ from the reference in reciting compounds which are substituted in the pyridine ring along with a pentene side chain embraced herein. Dull et al. show examples of butene analog with substituents in the pyridinyl ring. However, as noted above, Dull et al. teaches the equivalency of exemplified side chain and the substituted pyridinyl ring with claimed therein in the definition of the variables. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in pyridine ring and as well as the side chain as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bencherif et al. US 5,811,442.

Teachings of Bencherif et al. as discussed in the above 102 rejection is incorporated herein.

Again instant claims differ from the reference in reciting variously substituted in pyridine ring, and olefinic side chain particularly a pentene side chain. Bencherif et al. as note above teaches in the examples butene side chain with variously substituted pyridine ring compounds. However, Bencherif et al. in the definition of n teaches equivalency of butene side chain with pentene. See col.3 lines 63-65. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in pyridine ring and as well as the side chain as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

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### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 12-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 5,597,919. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter embraced herein overlaps with the claims of US 5,597,919. Note the 3-methoxypyridinyl compounds are claimed in the US 5,597,919 is also claimed herein .

Claims 12-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 and 5-7 of U.S. Patent No. 5,616,716. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter embraced herein overlaps with the claims of US 5,616,716. See above 102 and 103 rejection for overlapping subject matter.

Claims 12-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 08/631,761.



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Although the conflicting claims are not identical, they are not patentably distinct from each other because subject matter embraced herein is also embraced in the copending application 08/631,761.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Examiner wishes to thank the applicants for disclosing 6 copending applications. Although most of them appears to have non overlapping subject matter, some are not available to the examiner. Applicants should therefore identify any copending applications that may have overlapping subject matter to avoid obviousness-type double patenting.

References cited in the Information Disclosure Statement are made of record except for the International Search Report which is not a publication per se and thus is not properly cited as such in the IDS. See MPEP 2205.

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian ( Bala) whose telephone number is (703) 305-1674. The examiner can normally be reached on weekdays from 8.30 AM to 5.00 PM.

The fax phone number for the organization where this application or proceeding is assigned (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

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VB

V. Balasubramanian (Bala)

7/27/2000

*Mukund J. Shah*

MUKUND J. SHAH

SUPERVISORY PATENT EXAMINER

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